

**REMARKS**

Upon entry of the Amendment, claims 2-26 will be pending in the application. Claim 1 is canceled. Claims 22-26 are new. Claims 2, 6-14, and 21 are amended. Claims 14-19 are withdrawn from consideration.

Claims 2, 7 to 14, and 21 are amended to revise the dependencies thereof. The specification supports the amendment to claim 6, such as on page 31. The specification supports claim 22, such as on page 31. The specification supports claim 23, such as on page 23. The specification supports claim 24, such as on pages 26-27. The specification supports claim 25, such as on page 27. The specification supports claim 26, such as on page 31. Therefore, no new matter has been added.

**I. STATEMENT OF SUBSTANCE OF INTERVIEW**

Initially, Applicants wish to express their thanks for the courtesies extended by the Examiner and his Supervisor at the Interview held on June 14, 2007. During the interview, the Examiners and Applicants' representatives discussed the distinctions between the claimed methods over the art cited for the rejection under 35 U.S.C. § 103. Applicants understand that the Examiner acknowledges that photographic development is different from photoresist development. Further, Applicants and the Examiner discussed the Ag/binder ratio recited in claim 6. Furthermore, Applicants and the Examiner discussed the addition of a fixation step.

It is respectfully submitted that the instant STATEMENT OF SUBSTANCE OF INTERVIEW complies with the requirements of 37 C.F.R. §§1.2 and 1.133 and MPEP §713.04.

**II. Response to Rejections under 35 U.S.C. § 103**

The outstanding Office Action includes thirteen rejections under 35 U.S.C. § 103, as follows:

Claims 1, 10, 12, 20 and 21 have been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Published Application No. 2001/0015279 to Marutsuka *et al.* ("Marutsuka '279") in view of U.S. Patent No. 4,927,897 to Kawata *et al.* ("Kawata '897");

Claims 1, 10, 12, 20 and 21 have been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Marutsuka '279 in view of JP 11-170421 to Nakabeppu *et al.* ("Nakabeppu '421");

Claims 2 and 3 have been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Marutsuka '279 in view of Kawata '897 as applied to claim 1 above, and further in view of U.S. Patent No. 4,387,154 to Whitmore ("Whitmore '154");

Claims 2 and 3 have been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Marutsuka '279 in view of Nakabeppu '421 as applied to claim 1 above, and further in view of Whitmore '154;

Claims 4, 5 and 7 have been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Marutsuka '279 in view of Kawata '897 and Whitmore '154 as applied to claim 2 above, and further in view of U.S. Patent No. 4,160,669 to Habu *et al.* ("Habu '669");

Claim 4, 5 and 7 have been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Marutsuka '279 in view of Nakabeppu '421 as applied to claim 2 above, and further in view of Habu '669;

Claims 6 and 8 have been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Marutsuka '279 in view of Nakabeppu '421 as applied to claim 1 above, and further in view of U.S. Patent No. 3,989,522 to Poot *et al.* ("Poot '522");

Claim 9 has been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Marutsuka '279 in view of Kawata '897 as applied to claim 1 above, and further in view of U.S. Patent No. 4,362,796 to Monroe ("Monroe '796");

Claim 9 has been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Marutsuka '279 in view of Nakabeppu '421 as applied to claim 1 above, and further in view of Monroe '796;

Claim 11 has been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Marutsuka '279 in view of Kawata '897 as applied to claim 1 above, and further in view of U.S. Patent No. 4,631,214 to Hasegawa ("Hasegawa '214"); and

Claim 11 has been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Marutsuka '279 in view of Nakabeppu '421 as applied to claim 1 above, and further in view of Hasegawa '214; and

Claim 13 has been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Marutsuka '279 in view of Kawata '897 as applied to claim 1, and further in view of U.S. Patent No. 7,060,241 to Glatkowski ("Glatkowski '241"); and

Claim 13 has been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Marutsuka '279 in view of Nakabeppu '421 as applied to claim 1 above, and further in view of Glatkowski '241.

Claim 1 is canceled. As a result, the rejections of claim 1 and the claims depending from claim 1 are now moot.

With respect to claim 6, Marutsuka '279 is deficient in that it fails to teach (1) developing a silver salt-containing layer and (2) a silver salt-containing layer containing Ag and a binder at an Ag/binder volume ratio of 1/4 or higher. Nakabeppu '421 and Poot '522 are relied upon to alleviate these deficiencies. Nakabeppu '421 discloses exposing light-sensitive material through a photomask and developing the light-sensitive material. *See* paragraph [0015]. Nakabeppu

'421 discloses that the light sensitive material may include silver or salts thereof. *See* paragraph [0023]. Nakabeppu '421 discloses that the light sensitive material may be a positive or negative photoresist. *See* paragraph [0024].

Nakabeppu '421 fails to teach or suggest developing an exposed silver salt-containing layer with a development technique used for a silver salt photographic film. In contrast to a photographic development, Nakabeppu '421 discloses that its light-sensitive material is a photoresist. In this regard, Nakabeppu '421 fails to alleviate the deficiencies of the Marutsuka '279.

Further, Poot '522 fails to teach or suggest a silver salt-containing layer having an Ag/binder volume ratio of 1/4 or higher. Poot '522 is relied upon for teaching a *weight* ratio of colloid binder to silver halide expressed as silver nitrate of about 6:10. *See* col. 7, line 66 to col. 8, line 2 (emphasis added). The weight ratio disclosed in Poot '522 converts to a Ag/binder volume ratio of 1/9.992. The conversion of the weight ratio disclosed in Poot '522 to an Ag/binder volume ratio entails (1) converting the Binder/AgNO<sub>3</sub> weight ratio to the Binder/Ag weight ratio, (2) converting the Binder/Ag weight ratio to the Binder/Ag volume ratio, and (3) converting the Binder/Ag volume ratio to the Ag/Binder volume ratio. The conversion is shown in more detail below.

(1) convert the Binder/AgNO<sub>3</sub> weight ratio to the Binder/Ag weight ratio

molecular weight of AgNO<sub>3</sub> is 169.89  
atomic weight of Ag is 107.868

$$\begin{aligned} &6 / (10 \times (\text{atomic weight of Ag} / \text{molecular weight of AgNO}_3)) \\ &6 / (10 \times (107.868/169.89)) = 6 / 6.34928 \end{aligned}$$

- (2) convert the Binder/Ag weight ratio to the  
Binder/Ag volume ratio

specific gravity of Ag is  $10.5 \text{ g/cm}^3$   
specific gravity of Binder is approximately  $1 \text{ g/cm}^3$

$6 / (\text{specific gravity of binder}) = \text{amount of Binder by volume}$   
 $6.34928 / (\text{specific gravity of Ag}) = \text{amount of Ag by volume}$

$$(6 / 1 \text{ g/cm}^3) / (6.34928 / 10.5 \text{ g/cm}^3) = 6 / 0.60469$$

- (3) convert the Binder/Ag volume ratio to the Ag/Binder volume ratio

$$\begin{aligned} \text{Binder/Ag weight ratio} &= 6/0.60469 \\ \text{Ag/Binder weight ratio} &= 0.60469/6 \\ &= 1 / 9.922 \end{aligned}$$

An Ag/Binder volume ratio of  $1/9.922$ , as disclosed in Poot '522, is lower than an Ag/binder volume ratio of  $1/4$ . In this regard, the weight ratio disclosed in Poot '522 is outside the Ag/binder volume ratio recited in claim 6.

For the purposes of the Examiner's convenience, Applicants provide herewith a copy of Fujita et al. "Transparent Conductive Mesh Film Using Silver Halide Photographic Technologies," *Society For Information Display 2007 International Symposium*, (May 23-25 2007). A copy of the Fujita was provided to the Examiner at the interview on June 14, 2007. Applicants have confirmed that the date of Fujita, which was authored by Fuji personnel, is May 23-25, 2007.

### **III. Response to Double Patenting Rejection**

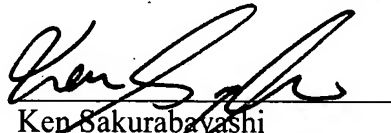
Claims 1, 13, and 20 are provisionally rejected on the ground of non-statutory obviousness-type double patenting as allegedly being unpatentable over claims 1-6 of co-pending Application No. 11/159,218.

Applicants defer responding at this time to this provisional obviousness-type double patenting rejection, pursuant to MPEP § 804(I)(B).

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

Applicant herewith petitions the Director of the USPTO to extend the time for reply to the above-identified Office Action for an appropriate length of time, if necessary. Unless a check is attached, any fee due under 37 C.F.R. § 1.17(a) is being paid via the USPTO Electronic Filing System, or if not paid through EFS, the USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

  
Ken Sakurabayashi  
Registration No. 58,490

SUGHRUE MION, PLLC  
Telephone: (202) 293-7060  
Facsimile: (202) 293-7860

WASHINGTON OFFICE

**23373**

CUSTOMER NUMBER

Date: August 30, 2007